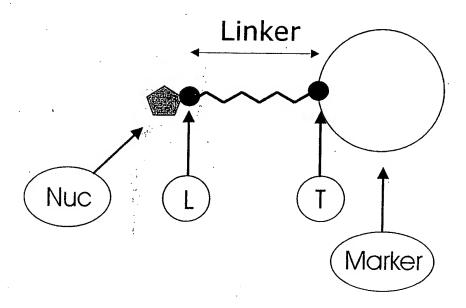
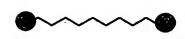
OLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR U. : THE SAME
Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

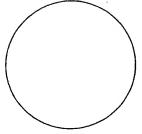
Fig. 1



Legend:







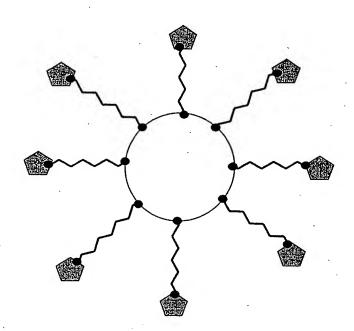
Nuc-component

Linker component

Marker component

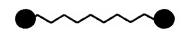
JMOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR JG THE SAME
Application No.: 10/578, 313
Aty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

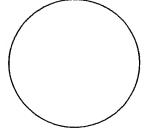
Fig. 2



Legend:







Nuc-component

Linker component

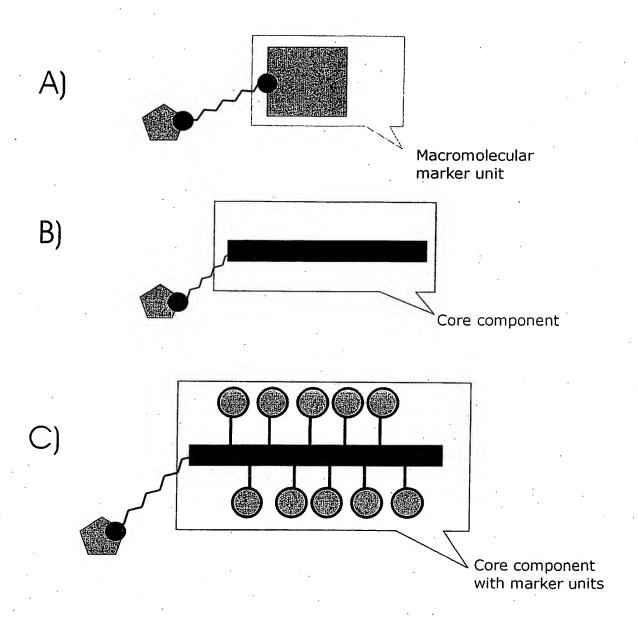
Marker component

Fig. 3

$$R_5$$
 R_4
 R_3
 R_2
 R_1

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKA SOV et al.

Fig. 4



Legend:

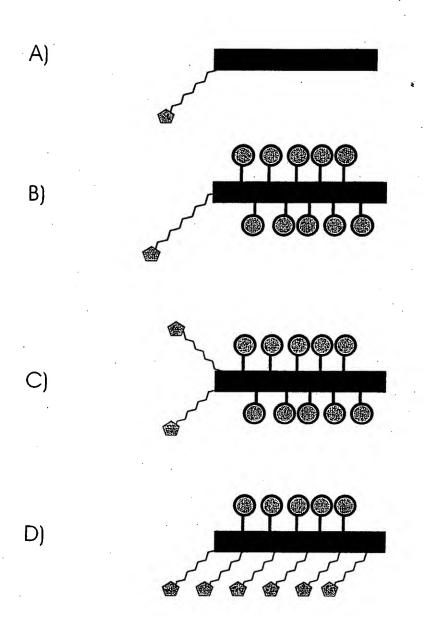


Nuc-component

Linker component

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Atty: Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Fig. 5



Legend:



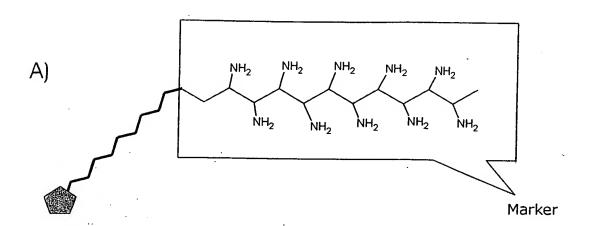


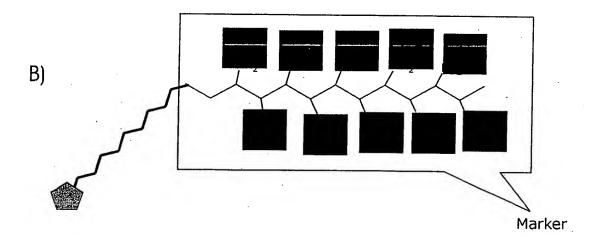




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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Fig. 6





Legend:







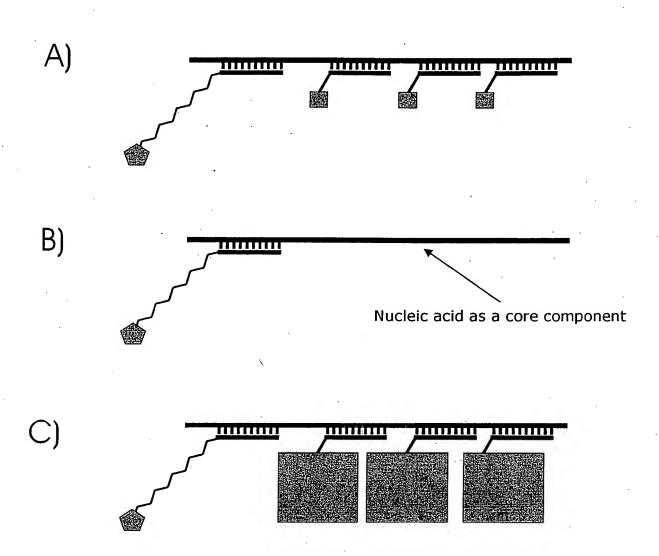
Nuc-component

Linker component

Signal giving marker unit

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
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Fig. 7



Legend:







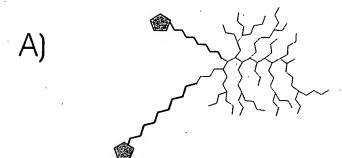


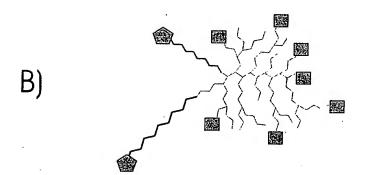
Nuc-component

Linker component

Signal giving marker unit

Nucleic acid with one signal giving marker unitTitle: MAC MOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR Conf. THE SAME
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Aty. Docket No.: 076030-0011
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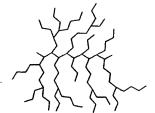
Legend:







Signal giving marker unit

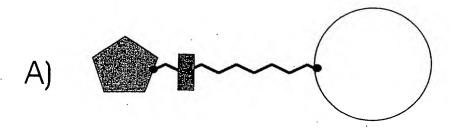


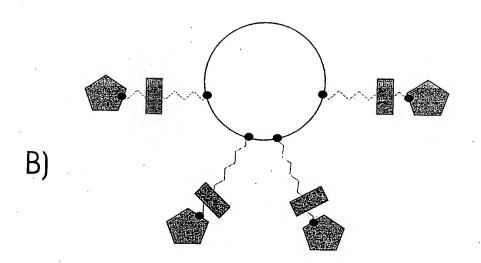
Branched polymer as a core component e.g. Dendrimer

Linker component

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

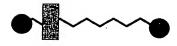
Fig. 9

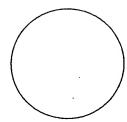




Legend:







Nuc-component

Linker component with a cleavable compound?

Marker component

$$B) \qquad \underset{N_{a} \sim 0}{\overset{\circ}{\underset{P}{\longrightarrow}} \circ \overset{\circ}{\underset{N_{a}}{\longrightarrow}} \circ \overset{\circ}{\underset{N_{$$

MOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR GITHE SAME
Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Title: MA. MOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR G THE SAME
Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

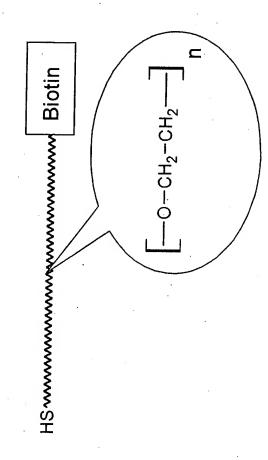
Fig. 13

Title: MAC. ..MOLECULAR NUCLEOTIDE.COMPOUNDS AND METHODS FOR C__...G THE SAME Application No.: 10/578, 313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

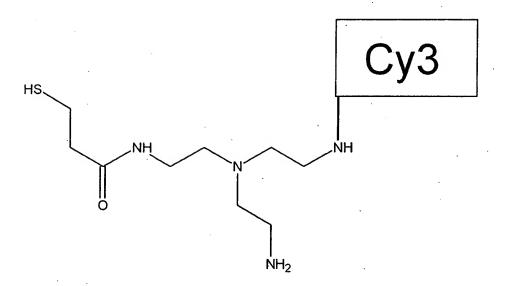
Title: MA

10LECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR Application No.: 10/578,313 Atty. Docket No.: 076030-0011 Inventor: Dmitry CHERKASOV et al.

3 THE SAME

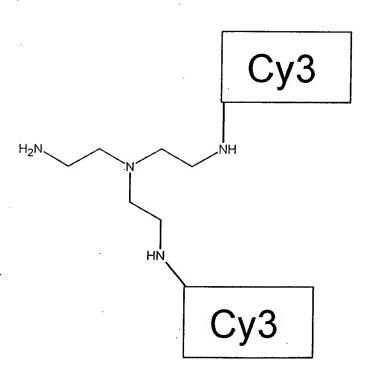


Title: M. JMOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.



MOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR G THE SAME
Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al. Title: MA.

Fig. 20





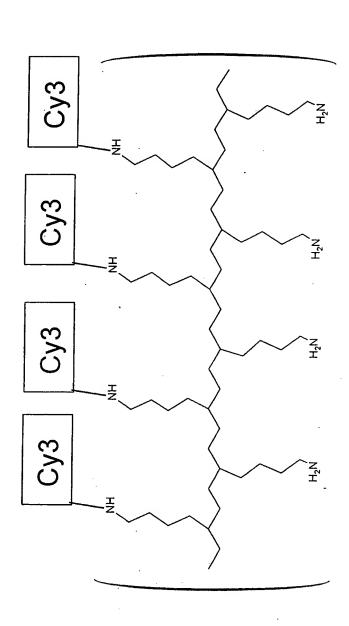
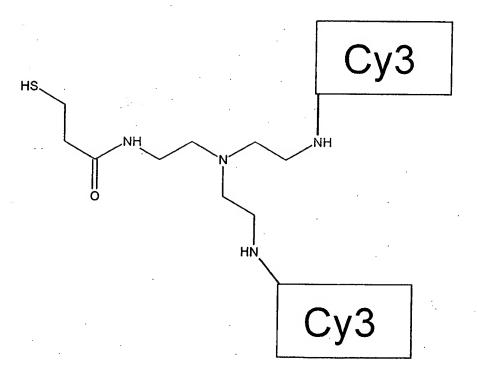


Fig. 22



Title: MA. AOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al. J THE SAME

Fig. 24

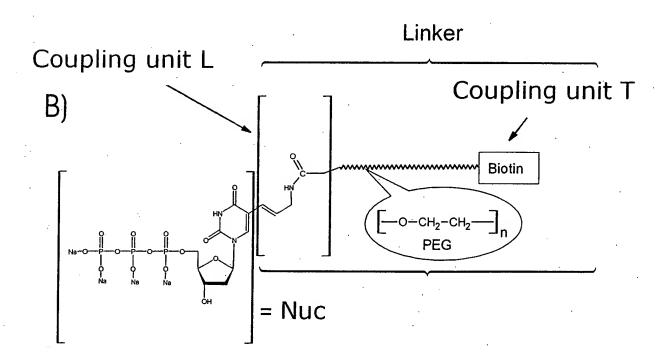
Title: MAC...JMOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR JUNG THE SAME
Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Fig. 27

Coupling unit L

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Fig. 28



Legend:

- Chemical structure of the nuc-linker-component A)
- Schematic appointment of individual components B)



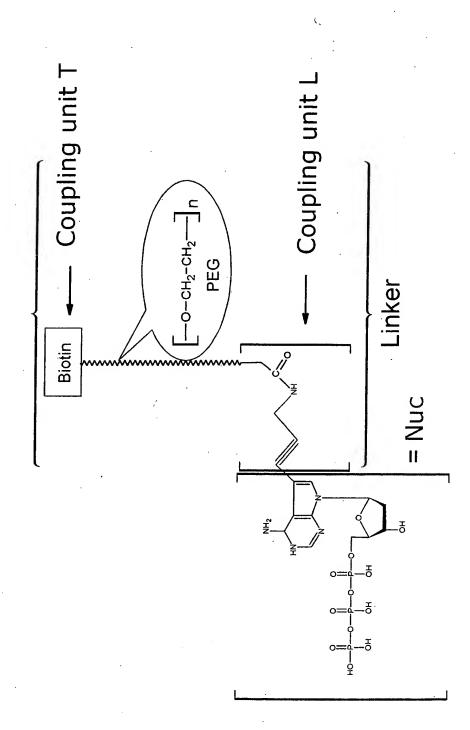


Fig. 30

Fig. 31 A

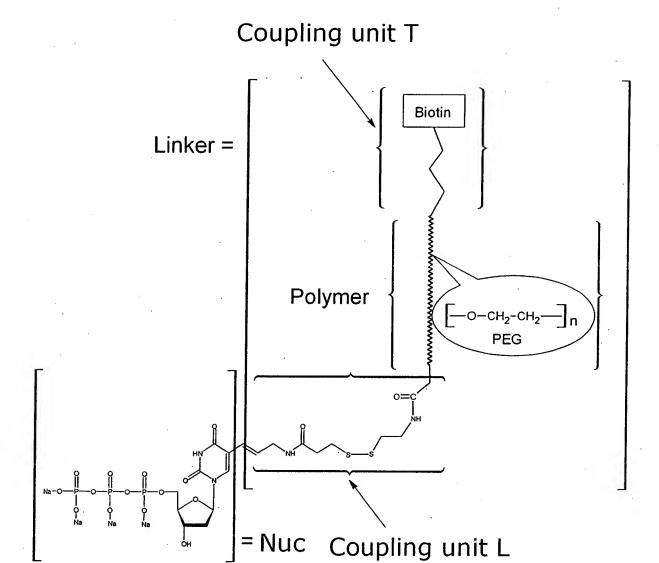
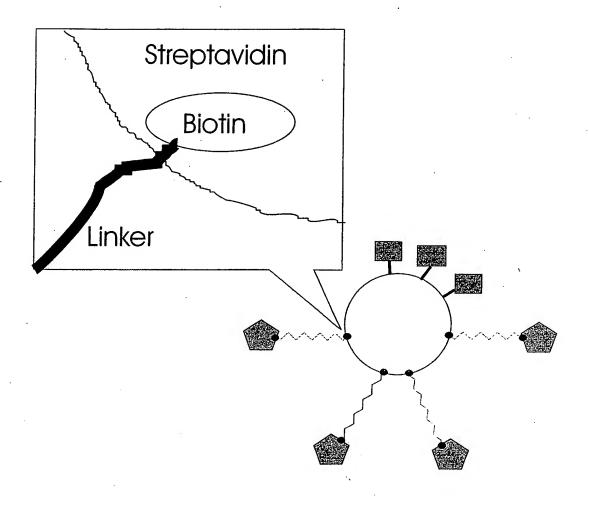


Fig. 31 B

"Title: MACROMOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR USING THE SAME Application No.: 10/578,313 Aty. Docket No.: 076030-0011 Inventor: Dmitry CHERKASOV et al.

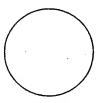
Fig. 32



Legend:



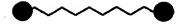
dUTP as a nuc-component



Strepavidin as a marker component



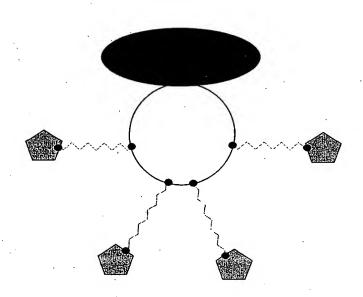
Fluorescent dye



Linker component

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Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Fig. 33



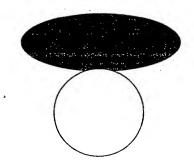
Legend:



dUTP as a nuc-component



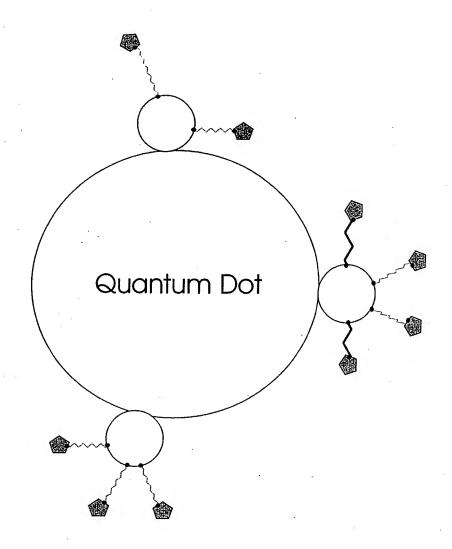
Linker component



Strepavidin-enzyme conjugate as a marker component

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
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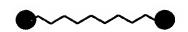
Fig. 34



Legend:



dUTP as a nuc-component



Linker component

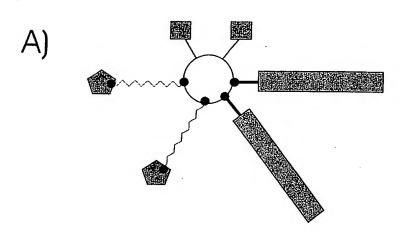


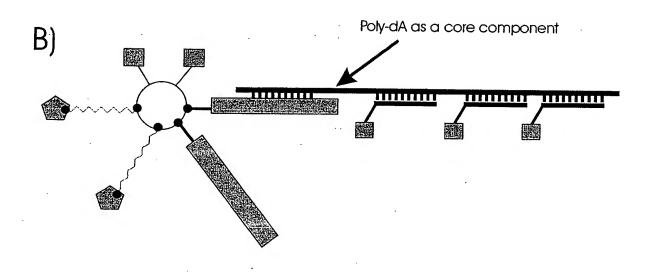
Strepavidin attached to Quantum Dot

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

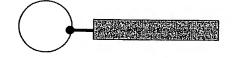
Fig. 35





Legend:



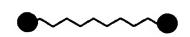




dUTP as a nuc-component

Strepavidin-oligonucleotide as a marker component

Fluorescent dye



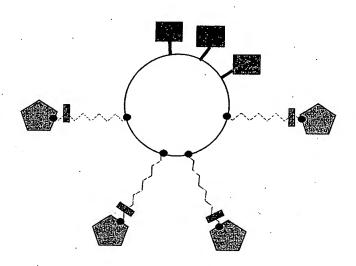




Labeled oligonucleotide as a marker unit

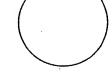
Title: MAC...JMOLECULAR NUCLEOFIDE COMPOUNDS AND METHODS FOR COING THE SAME Application No.: 10/578, 313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Fig. 36



Legend:



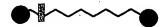




dUTP as a nuc-component

Strepavidin as a marker component

Fluorescent dye

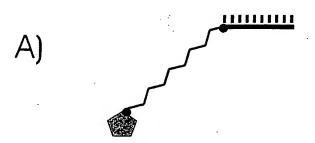


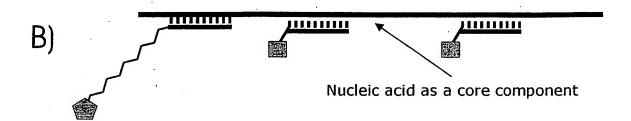
Linker component with a cleavable compound

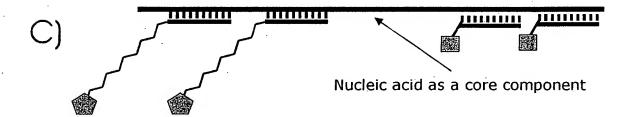
ile; MA. MOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR ... IG THE SAME

Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Fig. 37



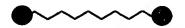


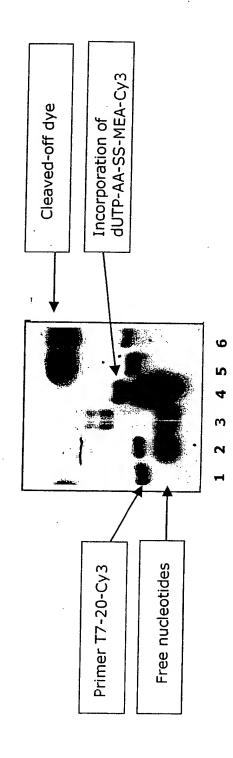


Legend:



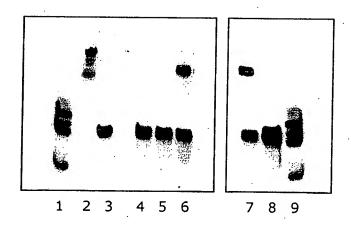
111111111



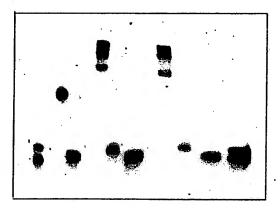


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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.



1 2 3 4 5 6 7 8 9 10

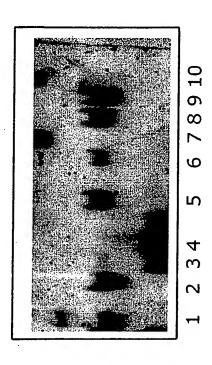
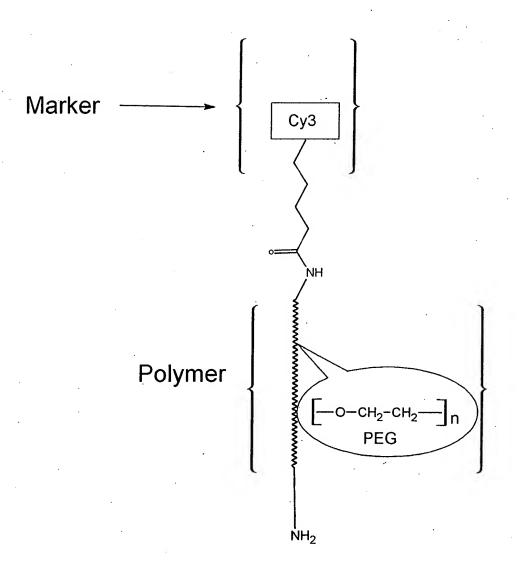


Fig. 42 A

Fig. 42 B



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Inventor: Dmitry CHERKASOV et al.

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Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

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Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Title: Ms. JMOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al.

Title: M. JMOLECULAR NUCLEOTIDE COMPOUNDS AND METHODS FOR Application No.: 10/578,313
Atty. Docket No.: 076030-0011
Inventor: Dmitry CHERKASOV et al. ..VG THE SAME

Fig. 48

...IG THE SAME

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Fig. 49

